

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:	)	Examiner: Stevens, Robert
Phillip C. Hodge	)	
	)	Art Unit: 2162
	)	
Serial No.: 10/780, 271	)	Confirmation No.: 2235
	)	
Filed: February 17 ,2004	)	
	)	
Title: Real Time Data Management	)	
Apparatus, System and Method	)	
	)	Attorney Docket No.: 110308.0005
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June 7, 2010	)	
	)	
	)	
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November 6, 2010	)	

July 25, 2011

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Honorable Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22113-1450

**REPLY BRIEF**

Sir:

This Reply Brief is filed in accordance with 37 C.F.R. § 41.41 in response to the Examiner's Answer dated May 25, 2011. The arguments in response to the Examiner's arguments begin on page 28.

## **1. REAL PARTIES IN INTEREST**

The real party in interest is Imaging Science & Services, Inc., the assignee of record.

## **2. RELATED APPEALS AND INTERFERENCES**

There are no other prior or pending appeals, interferences or judicial proceedings known to appellants, their legal representative, or assignee, which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

### **3. STATUS OF THE CLAIMS**

Pending: 1, 3-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56

Rejected: 1, 3-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56

Allowed: None

Cancelled: None

Withdrawn: None

Objected to: None

Independent: 1, 27, 32, 33, 40, 47 and 56

Appealed: 1, 3-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56

**4. STATUS OF AMENDMENTS**

No amendments were filed in the application subsequent to the Final Office Action.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER

Appellant notes that citations that include paragraph numbers and line numbers refer to the line number starting at the top of the paragraph, not the page.

### Independent Claim 1

Claim 1 recites a digital computer system (specification, page 10, paragraph [0037], line 1; figure 2, digital computer 10). The digital computer system includes a terminal and a data-management system for generating a hyper link in real time between an electronic document opened in a computer application and a target document (specification, page 11, paragraph [0038], lines 16-19; specification, page 13, paragraph [0044], lines 5-8; figures 3A-3D, DMS 100). The digital computer terminal includes a computer readable memory and a data-capture device (specification, page 10, paragraph [0037], line 8; figure 2, data-capture device 26; specification, page 10, paragraph [0038], lines 1-3).

The data-management system includes data-capture logic for controlling capture of electronic data by said data-capture device (specification, page 16, lines 1-2). The data management system also includes target-document logic for generating said target document from said electronic data (specification, page 16, lines 2-3). The data management system further includes link-generating logic for substantially simultaneously storing said target document in said computer readable memory and

generating said hyper link to said target document and said electronic document in real time (specification, page 16, lines 3-5).

The data management system also includes data-management logic for transmitting said electronic document and said target document to a data storage device (specification, page 25, paragraph [0076], lines 1-3). The data management system also includes link-editing logic for opening, displaying, and editing said target document and for updating a path of said hyper link (specification, page 13, paragraph [0043], lines 1-7). The data-management logic and said link-editing logic automatically updates the path of said hyper link to maintain functionality of said hyper link and to render said hyper link operable following said transmission (specification, page 25, paragraph [0076], lines 1-3).

#### Independent Claim 27

Independent claim 27 recites a data-management system for generating a plurality of links to target documents in an electronic document (specification, page 4, paragraph [0010], lines 1-2). The data-management system includes a digital computer for creating and editing an electronic document (specification, page 10, paragraph [0037], line 1; figure 2, digital computer 10). The data-management system includes a data capture device (specification, page 10, paragraph [0037], line 8; figure 2, data-capture device 26).

The data-management system also includes a means for generating a plurality of target documents from electronic data captured by a data-capture device

(specification, page 27, paragraph [0080], lines 1-3). The means may include a batch-scan option (specification, page 27, paragraph 80, lines 3-5; figure 15, batch-scan option 227). The data-management system further includes means for assigning a sequential identifier to each of said plurality of target documents as said target documents are generated (page 18, paragraph [0060], lines 8-12). One means may include a batch-control logic provided to the DMS (page 18, paragraph [0060], lines 8-12). The data-management system also includes means for storing said plurality of captured target documents in a computer readable memory. One means may include a prepare-for-CD option (specification, page 25, paragraph [0076], lines 1-2; figure 13, option 205). The data-management system includes means for generating a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents (specification, page 29, paragraph [0086], lines 1-7). One means may include a Batch-Import option (specification, page 29, paragraph [0086], lines 4-8; figure 17, option 257). The data-management system further includes means for opening, displaying, and editing said target document (specification, page 13, paragraph [0043], lines 1-7). One means may include a computer application for creating viewing or editing electronic documents (specification, page 10, paragraph [0038], lines 5-10). The data-management system also includes a means for updating a path of said plurality of hyperlinks in a user-selected range of said electronic document and to render said hyper link operable following the transmission (specification, page 25, paragraph [0076], lines 10-12).



### Independent Claim 32

Independent claim 32 recites a computer system for linking a target document to a portion of an electronic document in real time (specification, page 4, paragraph [0039], lines 21-22). The computer system includes a computer for generating and editing an electronic document (specification, page 10, paragraph [0037], line 1; figure 2, digital computer 10). The computer system also includes link-generating logic operable with said computer application for generating a link to said target document (specification, page 16, lines 3-5). The computer system further includes link-editing logic for opening, displaying, and editing said target document and for updating a path of said link (specification, page 13, paragraph [0043], lines 1-7). The target document is an electronic reproduction of a hardcopy document (specification, page 10, paragraph [0038], lines 10-12). The target document is generated by scanning said hardcopy document with an optical data-capture device (specification, page 9, paragraph [0036], lines 1-5).

The link is to be generated at approximately the same time as said captured target document is to be saved and the link is automatically updated and rendered said hyper link operable following the transmission (specification, page 11, paragraph [0038], lines 16-18). The computer application is one of a group consisting of a spreadsheet, word processor, database, presentation application, and any combination thereof (specification, page 10, paragraph [0038], lines 7-10).

### Independent Claim 33

Independent Claim 33 recites a data-management system for linking a portion of an electronic document to a target document (specification, page 4, paragraph [0039], lines 21-22). The data-management system includes a data-capture device for capturing electronic data representing an information object (specification, page 10, paragraph [0037], line 8; figure 2, data-capture device 26). The data-management system also includes means for generating said target document from said electronic data (specification, page 8, paragraph [0033], lines 10-14). The means for generating may include an optical scanner, a data-capture device, or any other device capable of capturing a visible image, audible sound, or other observable information object as electronic data (specification, page 8, paragraph [0033], lines 11-16). The data-management system further includes a computer readable memory to store said target document (specification, page 19, paragraph [0058], lines 2-6). The data-management system also includes means for storing said target document in said computer readable memory and generating a link to said target document in said electronic document (specification, page 16, lines 3-5). The means may include a data-management logic (specification, page 16, lines 3-5).

The data-management system also includes means for transmitting said electronic document and said target document to a data storage device (specification, page 25, paragraph [0076], lines 1-3). One means may include a Prepare-for-CD option (specification, page 25, paragraph [0076], lines 1-2; figure 13, option 205). The

data-management system further includes means for opening, displaying, and editing said target document and for updating a path of said plurality of hyperlinks in a user-selected range of said electronic document (specification, page 13, paragraph [0043], lines 1-7). One means may include a computer application for creating viewing or editing electronic documents (specification, page 10, paragraph [0038], lines 5-10). Transmitting the electronic document and target document means automatically updates a path of said link to render said link operable following said transmission (specification, page 25, paragraph [0076], lines 1-3).

#### Independent Claim 40

Independent Claim 40 recites an electronic-document management method for creating and managing an electronic document having a link to a target document in a computer application (specification, page 11, paragraph [0038], lines 16-18). The method includes generating a target document from electronic data representing an information object captured by a data-capture device (specification, page 8, paragraph [0034], lines 3-7).

The method also includes storing said target document in a computer readable memory and generating said link at said user-selected location in said electronic document for opening, displaying, and editing said target document (specification, page 26, paragraph [0077], lines 8-13). The method further includes transmitting said electronic document and said target document to a data storage device and updating the path of said link upon receiving a command from a user and updating a path of said

link to render said link operable after said transmission (specification, page 25, paragraph [0076], lines 1-3).

#### Independent Claim 47

Independent claim 47 recites an electronic-document management method for creating and managing an electronic document having a plurality of links to target documents in a computer application. The method includes generating a plurality of target documents from electronic data representing one or more information objects captured by a data-capture device (specification, page 27, paragraph [0081], lines 1-3). The method also includes sequentially assigning each of said plurality of target documents an identifier and storing said target documents in an order according to said identifier in a computer readable memory (specification, page 27, paragraph [0081], lines 7-13). The method further includes generating one or more links to the target documents in said electronic document for opening, displaying, and editing said target document (specification, page 29, paragraph [0086], lines 1-4). The method also includes updating the path of said link and render said hyper link operable following the transmission (specification, page 25, paragraph [0076], lines 1-3).

#### Independent Claim 56

Independent Claim 56 recites a data-management system for generating a hyperlink in real time between a portion of an electronic document opened in a computer application and a target document (specification, page 4, paragraph [0039],

lines 21-22). The system includes a digital computer terminal comprising a computer readable memory and a data-capture device (specification, page 10, paragraph [0037], line 8; figure 2, data-capture device 26; specification, page 10, paragraph [0038], lines 1-3). The system also includes data-capture logic in communication with said digital computer terminal for controlling capture of electronic data by said data-capture device (specification, page 5, paragraph [0047], lines 1-2). The system further includes a target-document logic in communication with said digital computer terminal for generating said target document from said electronic data (specification, page 21, paragraph [0066], lines 4-6). The system also includes link-generating logic in communication with said digital computer terminal for storing said target document in said computer readable memory and generating said link to said target document in said electronic document in real time (specification, page 22, paragraph [0067], lines 15-18). The system also includes data-management logic for transmitting said electronic document and said target document to a data storage device (specification, page 25, paragraph [0076, lines 1-3). The system further includes link-editing logic for opening, displaying, and editing said target document and for updating a path of said link wherein said data-management logic (specification, page 13, paragraph [0043], lines 1-7). The link-editing logic automatically updates a path of said link to maintain functionality of said link following said transmission (specification, page 25, paragraph [0076, lines 1-3).

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

I. Whether claims 1, 3-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

II. Whether claims 1, 2-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim et al. (US Patent Publication No. 2003/0120729) (hereafter referred to as “Kim”) in view of Ferguson et al. (US Patent No. 6,820,094) (hereafter referred to as “Ferguson”) and Grefenstette et al. (US Patent Publication No. 2004/0205448) (hereafter referred to as “Grefenstette”).

## **7. ARGUMENT**

**I. Whether claims 1, 3-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

In accordance with 35 U.S.C. § 112, second paragraph, the Examiner must consider the claim as a whole to determine whether claims define the patentable subject matter with a reasonable degree of particularity. (MPEP 2173.02). The independent claims 1, 27, 32-33, 40, 47 and 56, are not vague or indefinite, rather the language of the claims as a whole reasonably describe the patentable subject matter.

In the Final Office Action (“FOA”), the Examiner argues that it is unclear how a link can be considered operable as it links to a document that no longer exists. (FOA, page 5). Appellant would like to expand and clarify this point of discussion. On page 8, paragraph [0070], a scenario is described where a user can select the “Clear Page” option to remove existing documents from the preview window of a target document, thereby removing it from the target document to be linked. Although the image is removed, the existing document is not deleted from its current storage location and selecting the “Save” option will generate and update the link to the existing image

document. Thus, the link can be preserved even if certain images or pages are removed from the target document.

Additionally, the claim language alone, as a whole, is reasonably definite. The claim language states “...updating a path of said hyper link, wherein said data-management logic and said link-editing logic automatically updates the path of said hyper link to maintain functionality of said hyper link and to render said hyper link operable following said transmission.” One having ordinary skill in the art would understand that a link can be updated to maintain functionality of the link subsequent to opening, displaying, and editing said target document.

The Examiner further argues that the claimed links are unclear. (FOA, Page 5). Appellant respectfully directs Examiner to the specification, page 4, paragraph [0039] that states that a link refers to “a relationship between the portion of the electronic document and at least one target document.” An example is a hyperlink, however, the command executed when clicking on the link can be written in various languages such as, Hypertext Markup Language (HTML), C, Basic, Java, Assembler and the like. Therefore, the specification provides a clear definition for the claimed links. Accordingly, claims independent claims 1, 27, 32-33, 40, 47 and 56 are definite and meet the requirements of 35 U.S.C. § 112, second paragraph. Therefore, Appellant respectfully requests that this rejection be reversed.

## **II. Whether claims 1, 2-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56 are**



**rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim in view of Ferguson and Grefenstette.**

In order to establish a prima facie case of obviousness under 35 U.S.C. §103, the prior art reference (or references when combined) must teach or suggest all the claim limitations. (MPEP 2143(A)). Section 2143(A) of the MPEP, reads: “The rationale to support a conclusion that the claim would have been obvious is that **all the claimed elements** were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions.”

The teaching or suggestion of all the claimed elements to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Additionally, the key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious; the analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit. *KSR Int'l v. Teleflex Inc.*, 550 U.S. 398, 418, 82 U.S.P.Q. 2d 1385, 1395-97 (2007). A general incentive does not make obvious a particular result. *In re Dueul*, 51 F.3d 1552 (Fed. Cir. 1995).

Here, the criteria for establishing a prima facie case of obviousness are not satisfied since the combination of references does not teach or suggest all the claim limitations. Although there are numerous differences between the references and the claims, specifically, none of the references, alone and/or in combination, teach:

- a link-editing logic for opening, displaying, and editing said target

document and for updating a path of said hyper link,

- automatically updating the path of said hyper link to maintain functionality of said hyper link,
- generating a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents,
- linking a target document to a portion of an electronic document

Therefore, a prima facie anticipation rejection has not been established and the rejection should be reversed.

#### **A. Description of The Application and References**

The present invention is directed to a data-management system and device to be provided to a digital computer terminal for generating a link in real time between an electronic document opened in a computer application and a target document. The documents are opened for display and editing. The digital computer terminal includes a computer readable memory and a data-capture device, while the data-management system includes data-capture logic and device for controlling capture of electronic data by the data-capture device, target-document logic for generating the target document from the electronic data, which represents an information object captured by a data-capture device, and link-generating logic for substantially simultaneously storing the target document in the computer readable memory and generating the link to the target document in the electronic document in real time. The

present invention also provides a data-management system for generating a plurality of links to target documents in an electronic document.

The present invention is different in that a link is not limited to HTML and can include C, Basic, Java, Assembler, and the like. The present invention does not require an HTTP server, and can operate self-contained on a stand-alone PC (no network required), or over a network of any type – TCP/IP, IPX/SPX, Banyan's Vines, AppleTalk, DLC, etc. The present invention creates links in a spreadsheet, word processing document, database, or flowchart and can create multiple links in the same process required to create one link. The present invention also creates a link to any type of electronic document, regardless of what application created the document, and regardless of what application is required to view the document. Thus, the present invention goes beyond simple document management applications, since its main purpose is preparing documents with supporting links to be transmitted electronically while maintaining the operability of the links.

The Examiner has cited Kim, Ferguson and Grefenstette as purportedly rendering the claims obvious. Kim discloses an HTTP image file server for an image input device. (Kim, Abstract). When an image is scanned and saved, the HTTP server determines if an existing HTML page has been created, and if so, the HTML page is retrieved and updated to include a link to the newly stored image file. (Kim, paragraph [0049], figure 5).

Ferguson discloses a computer document management system that organizes document collections. (Ferguson, Col. 1, Lines 58-63). An attribute file called an STG is

maintained for each document. The STG file contains data fields and can be updated if a document is modified. (Ferguson, Col. 3, Lines 60-65). Additionally, a categorization utility can organize the documents into “smart folders.” If certain criteria is met, a link is created between a document and the associated smart folder. (Ferguson, Col. 7, Lines 34-36). If the document no longer meets the criteria of a smart folder, the link between the document’s STG file and the smart folder may be eliminated. (Ferguson, Col. 7, Lines 48-57). A change notification utility then updates the document collection organization file (DCO) to reflect the newly created or deleted links. (Ferguson, Col. 9, Lines 28-31). If the user deletes a document entirely, the change notification utility deletes all of the links in the DCO file. (Ferguson, Col. 9, Lines 39-42).

Grefenstette describes a system for enriching content of a document using personalities. (Grefenstette, Page 1, Paragraph [0013]). A set of services, or a personality, is assigned to a document based on the content and meta-data. (Grefenstette, Page 4, Paragraphs [0120], [0125], [0131]-[0132], [0135]). Once a personality is attached, an enriched view of the document can be produced. The user can specify how the enriched data appears, for example as a link or as content. (Grefenstette, Page 18, paragraph [0295]).

## **B. Claim Rejections**

### Claim 1

Independent Claim 1 recites in pertinent part:

...opening, displaying, and editing said target document and for updating a path of said hyper link, wherein said data-management logic and said link-editing logic automatically updates the path of said hyper link to maintain functionality of said hyper link and to render said hyper link operable following said transmission.

The Examiner argues that Ferguson teaches opening, displaying, and editing said target document where Ferguson discusses updating an STG data storage file triggered by a modified document. (FOA, Page 8). Although Ferguson discusses that a document can be modified, Ferguson does not have the capability or a logic for opening, displaying and editing a target document. Ferguson does not disclose how the document is modified. Additionally, modification does not teach or suggest opening and displaying. Thus, Ferguson fails to teach or suggest a link-editing logic for opening, displaying, and editing said target document and for updating a path of said hyper link.

The Examiner also argues that Ferguson suggests the element of automatically updating the path of said hyper link to maintain functionality of said hyper link and to render said hyper link operable following said transmission. (FOA, Page 8). However, the update that Ferguson describes is between the STG (attribute file) and the smart folder, not between the links' target file and the source document. Therefore, Ferguson discloses updating a file. Ferguson fails to teach or suggest automatically updating the path of a hyper link to maintain functionality of said hyper link.

As an illustrative example, in Ferguson, a smart folder could be created with the category "Green". Therefore, all STG files with a Color attribute of Green would be associated with the Green smart folder. When a STG file's color attribute is changed from Green to Red the link between the STG file and the Green smart folder would be

eliminated. Therefore Ferguson does not teach or suggest how to update the underlying path to a link. Ferguson never describes updating link paths but instead exhaustively describes categories and categorization of documents – see Column 6, Lines 65- end, Column 7, Lines 1 – 45. An STG file is not a link to a specific electronic document; instead, it is an attribute file that describe a corresponding electronic document.

Furthermore, Ferguson requires a two-step update process. After a link between an STG file and a smart folder is created or deleted, a change notification utility then updates the DCO (DCO maintains the storage hierarchy) to reflect the newly created or deleted links. (Ferguson, Col. 9, Lines 28-31). If the user deletes a document entirely, the change notification utility deletes all of the links in the DCO file. (Ferguson, Col. 9, Lines 39-42). Thus, the two-step Ferguson process teaches away from the claimed limitation in that the claims require an automatic update of the hyper link by the link-editing logic.

The Examiner further argues that Grefenstette suggests the limitation of a link-editing logic for updating a path of said hyper link at page 18, paragraph [0295]. (FOA, Page 8). However, the updating disclosed in Grefenstette is not updating of link paths to these source documents. Instead, Grefenstette discloses polling of those source documents for new information that is then re-inserted into the meta document. Paragraph [0295] describes a user option window where the user can select whether they prefer the enriched data to be inserted as a link or as content in a document. The enriched data can be updated from a data source each time a link or content is

accessed. Thus, Grefenstette discloses a conventional technique that allows a user to update data on a webpage statically or dynamically each time a webpage is accessed. This does not teach or suggest a link-editing logic for updating a path of a hyperlink.

The Examiner also suggests that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kim, Ferguson and Grefenstette. (FOA, Page 9). However, at the time the invention was made, it would not have been obvious to one skilled in the art to combine an image file server, a computer document system that organizes documents into a hierarchy and a system for enriching meta-data documents. Kim, Ferguson and Grefenstette in combination teach a listing of links to images organized in a hierarchy and enriched with data. Thus, the references alone or in combination do not teach or suggest all the claims as a whole.

Therefore, a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed. Accordingly, the rejection of dependent claims 3-16, 18-19 and 22-26 are also improper and should be reversed.

#### Claim 27

Independent claim 27 recites similar language to claim 1. Thus for the same reasons discussed above, Kim, Ferguson and Grefenstette, alone or in combination fail to teach or suggest all the claimed limitations, specifically, opening, displaying and editing said target document and updating a path of hyperlinks to render said hyper link operable following the transmission.

Additionally, the cited references fail to teach or suggest a means for generating

a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents. The Examiner cites Kim at paragraphs [0012] – [0014], discussing link generation, storage and retrieval of a created image file, which inherently required that the file be stored before being retrieved. (FOA, page 12). Kim discloses an image file server that stores a scanned image and then creates an HTML link to the image file stored in an HTML page. Kim does not mention generating a link at a **plurality of user-selected locations** in an electronic document to a plurality of captured target documents. There appears to be no user-selection in Kim, instead, Kim either generates an HTML link on the fly or stores in an HTML page (Kim, page 1, paragraph [0013]). The user does not even need to know the name and location of the file (Kim, page 1, paragraph [0014], lines 5-7). Accordingly, Kim does not teach or suggest means for generating a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents. Ferguson and Grefenstette do not remedy the deficiencies of Kim.

Thus, a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed. Accordingly, the rejection of dependent claims 28-30 are also improper and should be reversed.

#### Claim 32

Independent claim 32 recites similar language to claim 1. Thus for the same reasons discussed above, Kim, Ferguson and Grefenstette, alone or in combination fail to teach or suggest all the claimed limitations, specifically, opening, displaying and



editing said target document, updating a path of said link and automatically updating the link and rendering said hyper link operable following the transmission.

Additionally, the cited references fail to teach linking a target document to a portion of an electronic document. The Examiner cite Kim, Abstract as teaching this element where Kim discusses automatic link generation to a scanned document file (FOA, Page 14). The Abstract would appear to create a link to a full scanned document. There is no mention of linking a target document to a portion of an electronic document. Thus, Kim fails to teach this element. Ferguson and Grefenstette do not remedy the deficiencies of Kim.

Furthermore, in the Response to Arguments of the FOA, pages 2-3, the Examiner states that discussion of creating links in a spreadsheet/word processing document/database/flowchart is not set forth in the claim language. Appellant respectfully directs the Examiner's attention to claim 32 which recites "said computer application is one of a group consisting of a spreadsheet, word processor, database, presentation application, and any combination thereof and where the link-generating operable with said computer application." Thus, Appellant's argument in the previous Response to Non Final Office Action that the claim is different from the references in that the present invention creates links in a spreadsheet, word processing document, database, or flowchart is valid.

Thus, a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed.

### Claim 33

Independent claim 33 recites similar language to claim 1 and claim 32. Thus for the same reasons discussed above, Kim, Ferguson and Grefenstette, alone or in combination fail to teach or suggest all the claimed limitations, specifically, linking a portion of an electronic document to a target document, opening, displaying and editing said target document, updating a path of said link and automatically updating the link and rendering said hyper link operable following the transmission.

Thus a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed. Accordingly, the rejection of dependent claims 34, 36-39 are also improper and should be reversed.

### Claim 40

Independent claim 40 recites similar language to claim 1. Thus for the same reasons discussed above, Kim, Ferguson and Grefenstette, alone or in combination fail to teach or suggest all the claimed limitations, specifically, opening, displaying and editing said target document and updating a path of hyperlinks to render said hyper link operable following the transmission.

Thus a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed. Accordingly, the rejection of dependent claims 41, 43-45 are also improper and should be reversed.

#### Claim 47

Independent claim 47 recites similar language to claim 1. Thus for the same reasons discussed above, Kim, Ferguson and Grefenstette, alone or in combination fail to teach or suggest all the claimed limitations, specifically, opening, displaying and editing said target document and updating a path of hyperlinks to render said hyper link operable following the transmission.

Thus, a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed. Accordingly, the rejection of dependent claims 48-55 are also improper and should be reversed.

#### Claim 56

Independent claim 33 recites similar language to claim 1 and claim 32. Thus for the same reasons discussed above, Kim, Ferguson and Grefenstette, alone or in combination fail to teach or suggest all the claimed limitations, specifically, opening, displaying and editing said target document, updating a path of said link and automatically updating the link and rendering said hyper link operable following the transmission.

Thus, a prima facie case of obviousness has not been presented. The rejection is improper and should be reversed.

## **8. Response to Examiner's Answer**

Appellant respectfully maintains the original arguments appearing in the Appeal Brief, however, Appellant notes following comments in light of the Examiner's Answer ("EA").

### **A. 35 U.S.C. § 112**

To determine whether a claim complies with the written description requirement, "[t]he fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed." MPEP 2163.02. The MPEP further states that "[t]he claimed invention subject matter need not be described literally, i.e., using the same terms, in order for the disclosure to satisfy the description requirement." The independent claims 1, 27, 32-33, 40, 47 and 56, are not vague or indefinite, rather the language of the claims as a whole reasonably describe the patentable subject matter to those skilled in the art. For example, the independent claims state "...updating a path of said hyper link, wherein said data-management logic and said link-editing logic automatically updates the path of said hyper link to maintain functionality of said hyper link and to render said hyper link operable following said transmission." One having ordinary skill in the art would understand that a link can be updated to maintain functionality of the link subsequent to opening, displaying, and editing said target document.

On page 31 of the Examiner's Answer ("EA"), the Examiner asserts that Appellant's argument concerning how a preserved link is updated is unclear. Appellant

directs Examiner to the specification page 23, paragraph [0070], lines 13-17. Although an existing image document can be deleted from the target document it was linked to, the existing image document itself is not deleted from the current storage location. Instead, the link is update to no longer link the existing image document to the target document. Therefore, the link is preserved, because the link is updated to show that the image document is no longer linked to the target document.

The Examiner further argues that the claimed links are unclear. (EA, Pages 32-33). Appellant respectfully directs Examiner to the specification, page 4, paragraph [0039] that states that a link refers to “a relationship between the portion of the electronic document and at least one target document.” An example is a hyperlink, written in HTML, however, the command executed when clicking on the link can be written in various languages such as, Hypertext Markup Language (HTML), C, Basic, Java, Assembler and the like. Furthermore, the hyperlink could be rendered by code written in HTML, C, Basic, Java, Assembler and the like. For example, a programming language, such as C, could be written to link two documents together or could be written to render a link to a document. The Appellant notes that the claim language need not be literally described. The specification provides a clear definition for the claimed links. Accordingly, claims independent claims 1, 27, 32-33, 40, 47 and 56 are reasonably clear and meet the requirements of 35 U.S.C. § 112, second paragraph.

#### **B. 35 U.S.C. § 103(a)**

Appellant notes that when establishing a prima facie case of obviousness the

Office must clearly articulate the reason(s) the claimed invention would have been obvious. MPEP 2142 recites that:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 418, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 550 U.S. at 418, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval).

Additionally, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Appellant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). This requirement is intended to prevent unacceptable "hindsight reconstruction" where the claim is recreated from references using the Application as a blueprint.

In the EA, the Examiner has stated in conclusion to his arguments that the references have been reasonably interpreted as teaching the recited claim language. Additionally, on page 28, the Examiner states that discussions of inserting links into a scanned document are reasonably suggestive of the recited claim language, which specifically recites, "generating a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents." An insertion of links in a document appears to be conclusory reasoning by the Examiner to describe the claim language. Appellant respectfully notes that the reasoning used by the

Examiner is indicative of impermissible hindsight. The legal conclusions must be reached on the basis of the facts gleaned from the prior art and not a reconstruction gleaned from Appellant's disclosure.

### **Conclusion**

In light of the foregoing, it is respectfully submitted that claims 1, 3-16, 18, 19, 22-30, 32-34, 36-41, 43-45 and 47-56 are allowable over the references of record, and a ruling from the Board to that effect is therefore requested.

Respectfully submitted,

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## CLAIMS APPENDIX

### CLAIMS ON APPEAL

1. (Previously Presented) A digital computer system, including a terminal and a data-management system for generating a hyper link in real time between an electronic document opened in a computer application and a target document, said digital computer terminal comprising a computer readable memory and a data-capture device, said data-management system comprising:

data-capture logic for controlling capture of electronic data by said data-capture device;

target-document logic for generating said target document from said electronic data;

link-generating logic for substantially simultaneously storing said target document in said computer readable memory and generating said hyper link to said target document and said electronic document in real time; and

data-management logic for transmitting said electronic document and said target document to a data storage device and link-editing logic for opening, displaying, and editing said target document and for updating a path of said hyper link, wherein said data-management logic and said link-editing logic automatically updates the path of said hyper link to maintain functionality of said hyper link and to render said hyper link operable following said transmission.

2. (Cancelled)

3. (Previously Presented) The digital computer system according to claim 1, wherein said data-management logic transmits said electronic document to a top-level folder and said target document to a subfolder of said top-level folder.

4. (Previously Presented) The digital computer system according to claim 1, wherein said data storage device is one of a group consisting of a CD, DVD, floppy disk, hard disk, network drive, magnetic storage device, and any combination thereof.



5. (Previously Presented) The digital computer system according to claim 1 further comprising print-management logic for transmitting said target document to an output device to create a hardcopy of said target document.

6. (Previously Presented) The digital computer system according to claim 1, wherein said computer application is at least one of a group consisting of a word processor, spreadsheet, database, presentation application, web browser, financial planning application, mapping application, and publishing application.

7. (Previously Presented) The digital computer system according to claim 1, wherein said data-capture logic further controls a sequential capture of electronic data for a plurality of target documents to be arranged as a plurality of pages and linked to said electronic document with a single link.

8. (Previously Presented) The digital computer system according to claim 1 further comprising batch-control logic for initiating a sequential capture of electronic data for a plurality of target documents, said target documents to be linked to said electronic document with a plurality of links.

9. (Previously Presented) The digital computer system according to claim 8, wherein said batch-control logic assigns an identifier to a first target document and assigns a unique identifier to each subsequently-captured target document in an incremental manner.

10. (Previously Presented) The digital computer system according to claim 8, wherein said batch-control logic links a single target document to a plurality of locations in said electronic document.

11. (Previously Presented) The digital computer system according to claim 8, wherein said batch-control logic links a plurality of target documents to a single location in said electronic document.
12. (Previously Presented) The digital computer system according to claim 1, wherein said link is provided to an existing item displayed in said computer application.
13. (Previously Presented) The digital computer system according to claim 1 further comprising link-removal logic for removing a link from within a predetermined range in said computer application without removing a displayed item to which said link was provided.
14. (Previously Presented) The digital computer system according to claim 1, wherein the target document is at least one of a group consisting of a text document, an image, a sound recording, and a video recording.
15. (Previously Presented) The digital computer system according to claim 1, wherein said document-management system is provided to said computer application as an add-in.
16. (Previously Presented) The digital computer system according to claim 1, wherein said data-management system is included as a portion of said first computer application.
17. (Cancelled)
18. (Previously Presented) The digital computer system according to claim 1, wherein said link-generating logic further generates a visible icon within said electronic document to identify said link.

19. (Previously Presented) The digital computer\_system according to claim 1, wherein said link is a hyperlink.
20. (Cancelled)
21. (Cancelled)
22. (Previously Presented) The digital computer system of claim 1 further including print-management logic for printing said target document from within said electronic document.
23. (Previously Presented) The digital computer system of claim 1 further including batch-control logic for initiating a sequential capture of electronic data for continuously capturing electronic data for a plurality of target documents.
24. (Previously Presented) The digital computer system of claim 23, wherein said batch-control logic links said plurality of target documents as a multi-page target document to said electronic document with a single link.
25. (Previously Presented) The digital computer system of claim 23, wherein said batch-control logic links each of said plurality of target documents as a single-page target document to said electronic document with a corresponding number of links.
26. (Previously Presented) The digital computer system of claim 23, wherein said batch-control logic assigns an initial identifier to a first target document and a unique identifier to each subsequently-captured target document in an incremental manner.
27. (Previously Presented) A data-management system for generating a plurality of links to target documents in an electronic document, said data-management system comprising:

a digital computer for creating and editing an electronic document;  
a data capture device;  
means for generating a plurality of target documents from electronic data captured by a data-capture device;  
means for assigning a sequential identifier to each of said plurality of target documents as said target documents are generated;  
means for storing said plurality of captured target documents in a computer readable memory; and  
means for generating a link at a plurality of user-selected locations in said electronic document to said plurality of captured target documents; and  
means for opening, displaying, and editing said target document and for updating a path of said plurality of hyperlinks in a user-selected range of said electronic document and to render said hyper link operable following the transmission.

28. (Original) The system according to claim 27 further comprising means for printing said plurality of target documents linked to locations within a user-selected range of said electronic document.

29. (Original) The system according to claim 27 further comprising means for transmitting said electronic document and said plurality of target documents to a data storage device in a known relationship, wherein said data manager automatically updates a path of said plurality of said links to said transmitted target documents to maintain functionality of said links following said transmission.

30. (Original) The system according to claim 27 further comprising means for transmitting said electronic document to a top-level folder and said plurality of target documents to a subfolder of said top-level folder.

31. (Cancelled)

32. (Previously Presented) A computer system for linking a target document to a portion of an electronic document in real time, said computer system comprising:

- a computer for generating and editing an electronic document;
- link-generating logic operable with said computer application for generating a link to said target document, and link-editing logic for opening, displaying, and editing said target document and for updating a path of said link; wherein
- said target document is an electronic reproduction of a hardcopy document and is to be generated by scanning said hardcopy document with an optical data-capture device, further wherein
- said link is to be generated at approximately the same time as said captured target document is to be saved and the link is automatically updated and rendered said hyper link operable following the transmission, and further wherein
- said computer application is one of a group consisting of a spreadsheet, word processor, database, presentation application, and any combination thereof.

33. (Previously Presented) A data-management system for linking a portion of an electronic document to a target document, said data-management system comprising:

- a data-capture device for capturing electronic data representing an information object;
- means for generating said target document from said electronic data;
- a computer readable memory to store said target document;
- means for storing said target document in said computer readable memory and generating a link to said target document in said electronic document;
- means for transmitting said electronic document and said target document to a data storage device; and
- means for opening, displaying, and editing said target document and for updating a path of said plurality of hyperlinks in a user-selected range of said electronic document, wherein said transmitting means automatically updates a path of said link to render said link operable following said transmission.

34. (Original) The system according to claim 33, wherein said data-capture device is one of a group consisting of an optical scanner, a camera, a video camera, a sound-recording device, and any combination thereof.

35. (Cancelled)

36. (Previously Presented) The system according to claim 33, wherein said transmitting means transmits said electronic document to a top-level folder in said data storage device and said target document to a subfolder of said top-level folder.

37. (Previously Presented) The system according to claim 33, wherein said data storage device is one of a group consisting of a CD, DVD, a hard disk, web server, network drive, a magnetic storage medium, and any combination thereof.

38. (Original) The system according to claim 33 further comprising an output device for producing a hardcopy of said electronic document.

39. (Original) The system according to claim 38 further comprising means for transmitting said target document to produce a hardcopy of said target document.

40. (Previously Presented) An electronic-document management method for creating and managing an electronic document having a link to a target document in a computer application, said method comprising the steps of:

generating a target document from electronic data representing an information object captured by a data-capture device;

storing said target document in a computer readable memory and generating said link at said user-selected location in said electronic document for opening, displaying, and editing said target document; and

transmitting said electronic document and said target document to a data storage device and updating the path of said link upon receiving a command from a user; and updating a path of said link to render said link operable after said transmission.

41. (Original) The method according to claim 40 further comprising the step of displaying said target document in an inspection window before storing said target document.

42. (Cancelled)

43. (Previously Presented) The method according to claim 40, wherein the step of transmitting said electronic document and said target document comprises the steps of:

transmitting said electronic document to a top-level folder; and  
transmitting said target document to a subfolder of said top-level folder.

44. (Original) The method according to claim 40 further comprising the step of: printing said target document upon receiving a print-target command from a user.

45. (Original) The method according to claim 40 further comprising the step of displaying an icon to indicate a presence of said link at a location within said electronic document.

46. (Cancelled)

47. (Previously Presented) An electronic-document management method for creating and managing an electronic document having a plurality of links to target documents in a computer application, said method comprising the steps of:

generating a plurality of target documents from electronic data representing one or more information objects captured by a data-capture device;

sequentially assigning each of said plurality of target documents an identifier and storing said target documents in an order according to said identifier in a computer readable memory;

generating one or more links to the target documents in said electronic document for opening, displaying, and editing said target document; and

updating the path of said link and render said hyper link operable following the transmission.

48. (Original) The method according to claim 47 further comprising the step of:  
transmitting said electronic document and said target documents to a data storage device upon receiving a command from a user; and  
updating a path of said links to render said links operable after said transmission.

49. (Original) The method according to claim 48, wherein the step of transmitting said electronic document and said target document comprises the steps of:  
transmitting said electronic document to a top-level folder; and  
transmitting said plurality of target documents to a subfolder of said top-level folder.

50. (Original) The method according to claim 47 further comprising the step of:  
printing said target documents linked to locations within a user-selected range of said electronic document upon receiving a print-target command from a user.

51. (Original) The method according to claim 47 further comprising the step of displaying an icon to indicate a presence of said links at a plurality of locations in said electronic document.

52. (Original) The method according to claim 47 further comprising the step of updating a path of said links within a user-selected range of said electronic document upon receiving a command from a user.



53. (Original) The method according to claim 47, wherein said step of generating said links comprises the steps of:

identifying a number of user-selected locations for links within a user-selected range of said electronic document;

comparing said number of user-selected locations for links to a number of target documents to be linked; and

generating a link for a target document at each of said user-selected locations if said number of user-selected locations for links is the same as a number of target documents.

54. (Original) The method according to claim 47, wherein said step of generating said target documents comprises the step of generating a plurality of single-page target documents.

55. (Original) The method according to claim 47, wherein the step of generating said target documents comprises the step of generating a plurality of multi-page target documents.

56. (Previously Presented) A data-management system for generating a hyperlink in real time between a portion of an electronic document opened in a computer application and a target document, said system comprising:  
a digital computer terminal comprising a computer readable memory and a data-capture device;

data-capture logic in communication with said digital computer terminal for controlling capture of electronic data by said data-capture device;

target-document logic in communication with said digital computer terminal for generating said target document from said electronic data;

link-generating logic in communication with said digital computer terminal for storing said target document in said computer readable memory and generating said link to said target document in said electronic document in real time;

data-management logic for transmitting said electronic document and said target document to a data storage device; and

link-editing logic for opening, displaying, and editing said target document and for updating a path of said link wherein said data-management logic; and said link-editing logic automatically updates a path of said link to maintain functionality of said link following said transmission.

## EVIDENCE APPENDIX

None.

## RELATED PROCEEDINGS APPENDIX

None.